

# **July 2003**

### **Alternatives**

Based on input from the project advisory committee and area citizens, the preliminary alternatives for making improvements to WIS 83 were screened to the reasonable alternatives that have been retained for detailed study. The reasonable alternatives were developed to address the following key purpose and need factors:

- Present and future traffic demand
- Existing highway deficiencies and safety concerns
- Access management
- Environmental constraints such as wetlands, stream crossings, environmental corridors, historic structures, archaeological sites, and cemeteries
- Community values that include preserving the rural character and aesthetic features of the corridor
- Corridor preservation that provides a transportation "blueprint" to assist local officials in making land use and development decisions along with preserving land needed for future transportation improvements

### No Build Alternative

Under the No Build Alternative, WIS 83 would not be widened to provide additional roadway capacity. The existing highway would bear future traffic increases with effects on congestion, mobility, operational characteristics, and safety. Any future improvements would consist of activities that attempt to maintain current service levels, keep the driving surface in good condition, and address safety concerns at spot locations.

#### **Build alternatives**

In general the build alternatives would widen the existing highway to a multi-lane facility with a best-fit alignment that minimizes overall impacts to existing development and environmental resources. In the Genesee Depot area where traffic forecasts indicate additional capacity would not be needed by 2026, the alternatives include no build and reconstructing the existing two-lane highway. To consider longer-term needs, a four-lane corridor preservation alternative on existing alignment or west of existing WIS 83 at Genesee Depot is also evaluated.



# Section 1 – County NN to County X

The proposed reasonable build alternative is a four-lane hybrid urban/rural roadway with the following key features:

- Shoulders and ditches on outside edge of driving lanes
- Curb and gutter next to 30-foot grassed median
- Curb on outside edge of pavement in isolated areas to minimize impacts including the transition from the existing 5-lane urban roadway north of County NN to near the Fox River Tributary
- Approximately 170 feet total right-of-way
- 55 mph posted speed

## Section 2 – County X to County DE/E

Traffic forecasts indicate this WIS 83 section would not need additional traffic capacity within an approximate 20-year planning period. Thus the reasonable alternatives in this project section include the no build alternative, and the two-lane reconstruction alternative. These alternatives could be implemented as interim improvements until or if the highway in this section operates below Level of Service D.

The reasonable alternatives also include a long-term four-lane corridor preservation alternative that would provide an opportunity for local officials to plan for future capacity expansion if and when traffic volumes or safety factors indicate the need.

The three build alternatives are as follows:

- Two-lane reconstruction alternative
- Four-lane corridor preservation alternative
- Combination off-alignment alternative D / four-lane corridor preservation alternative

(A no build in Genesee Depot from the beginning of the off-alignment to Depot Road. The remaining roadway in Genesee Depot would likely be jurisdictionally transferred to the Town of Genesee and traffic volumes and congestion would be substantially reduced)



Because there are unique characteristics within the overall County X to County DE/E project section relative to appropriate alternatives, the following discussion is organized further by roadway subsections:

### **County X to Walnut Street**

The interim two-lane reconstruction alternative would consist of reconstructing the existing two-lane roadway to modern design standards with the following features:

- Shoulders and ditches on outside edge of driving lanes
- 12-foot wide driving lanes
- 10-foot wide shoulders with 3 feet paved
- Approximately 100 feet total right-of-way, acquisition likely to the 170-foot four-lane corridor preservation limits
- 55 mph posted speed

The four-lane corridor preservation alternative would be a four-lane hybrid urban/rural roadway with the following features:

- Shoulders and ditches on outside edge of driving lanes
- Curb and gutter next to 30-foot grassed median
- Curb on outside edge of pavement in isolated areas to minimize impacts
- Approximately 170 feet total right-of-way
- 55 mph posted speed

#### Walnut Street to WIS 59

The interim two-lane reconstruction alternative would consist of reconstructing the existing two-lane roadway to modern design standards with the following features:

- Curb and gutter on outside edge (36 feet curb to curb)
- Approximately 66 feet total right-of-way
- 35 mph posted speed

The four-lane corridor preservation alternative would be an urban roadway with a two-way center left turn lane and the following features:

- Curb and gutter on outside edge of driving lanes (66 feet curb to curb)
- 14-foot median for left turns
- Pedestrian sidewalk
- Approximately 90 feet total right-of-way
- 35 mph posted speed



### WIS 59 to County D

The interim two-lane reconstruction alternative would consist of reconstructing the existing two-lane roadway to modern design standards with the following features:

- Curb and gutter on outside edge (36 feet curb to curb)
- Approximately 49.5 to 66 feet total right-of-way
- 25-35 mph posted speed

The interim 2-lane reconstruction alternative in the commercial/residential segment from the railroad to Depot Road would consist of reconstructing the existing two-lane roadway to modern design standards with the following features:

- Curb and gutter on outside edge (40 feet curb to curb)
- Approximately 66 feet total right-of-way
- Posted speed 25 mph
- Parking on one side
- Pedestrian sidewalk

The four-lane corridor preservation alternative would be an undivided urban roadway with the following features:

- Curb and gutter on outside edge of driving lanes / no parking (52 feet curb to curb)
- Approximately 76 feet total right-of-way
- Pedestrian sidewalk
- 25-35 mph posted speed

## **County D to County DE/E**

The interim two-lane reconstruction alternative would consist of reconstructing the existing two-lane roadway to modern design standards with the following features:

- Curb and gutter on outside edge and next to 24-foot grassed median (72 feet curb to curb)
- Paved shoulders to accommodate turning vehicles
- Multi-use path on west side
- Approximately 98 feet total right-of-way
- 40 mph posted speed



The four-lane corridor preservation alternative would be a divided urban roadway with the following features:

- Curb and gutter on outside edge of driving lanes and next to 24-foot grassed median (76 feet curb to curb)
- Multi-use path on west side
- Approximately 102 feet total right-of-way
- 40 mph posted speed

### Off alignment four-lane corridor preservation alternative at Genesee Depot

Screening and refining the off-alignment four-lane corridor preservation alternatives in the Genesee Depot area focused on comparing the impacts of the various alignments that were considered initially. Input from area citizens, local officials, and state/federal review agencies also played an important role in the screening effort. Based on the initial effort, it was recommended that all off-alignment four-lane corridor preservation alternatives except "Alternative D" be eliminated from further consideration. Alternative D was recommended for further evaluation because it had the least overall impacts compared to other off alignment alternatives and the through town alternative. It would also minimize residential and business displacements on the east-west leg of WIS 83 passing through Genesee Depot, minimize access points, and avoid the right-angle turn.

Alternative D is a four-lane divided urban roadway with the following features:

- Curb and gutter on outside edge of driving lanes and next to 24-foot grassed median (76 feet curb to curb)
- Approximately 102 feet total right-of-way
- Pedestrian sidewalk
- At-grade railroad crossing
- 35 mph posted speed



## Section 3 – County DE/E to Hillside Drive

Because there are unique characteristics within the overall County DE/E to Hillside Drive section, relative to appropriate alternatives, the following discussion is organized further by roadway subsections.

### County DE/E to County G and Welsh Road to US 18

The proposed reasonable build alternative in both segments is a four-lane divided urban roadway with the following features:

- Curb and gutter on outside edge of driving lanes and next to 24-foot grassed median (76 feet curb to curb)
- Multi-use path on west side
- Approximately 102 feet total right-of-way
- 35 mph posted speed

### **County G to Welsh Road**

Due to cemetery constraints, the proposed reasonable build alternative is a fourlane undivided urban roadway with the following features:

- Curb and gutter on outside edge of driving lanes (52 feet curb to curb)
- Multi-use path on west side
- Approximately 77-103 feet total right-of-way
- 35 mph posted speed

### **US 18 to Hillside Road**

The proposed reasonable build alternative is a four-lane hybrid urban/rural roadway with the following features:

- Shoulders and ditches on outside edge of driving lanes
- Curb and gutter next to 30-foot grassed median
- Curb on outside edge of pavement in isolated areas to minimize impacts
- Multi-use path on west side
- Approximately 195 feet total right-of-way
- 45 mph posted speed



## Section 4 – Hillside Drive to County DR/Golf Road

The proposed reasonable build alternative is a four-lane divided urban roadway with right turn lanes and the following features:

- Curb and gutter on outside edge and next to 36-foot grassed median
- Approximately 136 feet total right-of-way
- Pedestrian sidewalk
- 35 mph posted speed

## Section 5 – County DR/Golf Road to Meadow Lane

The existing highway is a four-lane suburban roadway with shoulders; a cross section that is considered sufficient to handle forecast traffic. Therefore, no further improvements are recommended in this WIS 83 section.

Due to long-term safety concerns with increased highway and recreation trail use, the study team is evaluating a combined Lake Country Trail/Ice Age Trail grade-separated crossing. Recommendations regarding both trails will be provided in the Final EIS.

## Section 6 – Meadow Lane to WIS 16

The proposed reasonable build alternative is a four-lane hybrid urban/rural roadway with the following features:

- Shoulders and ditches on outside edge of driving lanes
- Curb and gutter next to 30-foot grassed median
- Curb on outside edge of pavement in isolated areas to minimize impacts
- Multi-use path from County KE to WIS 16
- Approximately 170-195 feet total right-of-way
- 45 mph posted speed